SECTION A. TECHNICAL NOTES

SCOPE OF THE SURVEY

Data for the National Science Foundation's (NSF) fiscal year (FY) 2002 report on research and development (R&D) expenditures were collected from 625 institutions of higher education in the United States and Outlying Areas. These institutions have doctoral programs in science and engineering (S&E), are historically black colleges or universities (HBCUs) that expend any amount of separately budgeted R&D in S&E, or are master's or bachelor's degree-granting institutions that expend at least $150,000 in separately budgeted R&D in S&E.

In addition, the survey collects information on R&D about each of the Nation's 36 federally funded research and development centers (FFRDCs). Of these 36 FFRDCs, 16 are administered by academic institutions, 16 are administered by nonprofit organizations, and 4 are administered by industrial organizations.

To qualify, an FFRDC must be engaged in basic or applied research, development, or management of R&D activities, and the results of these activities must be directly monitored by the Federal Government—usually a single agency—in a relationship expected to be maintained on a long-term basis. The center must be operated, managed, and administered as an autonomous organization or as an identifiable separate operating unit of its parent institution. Finally, 70 percent or more of the center's financial support must be received from the Federal Government. Although the same survey form (NSF Form 411) is used to collect data from both academic institutions and FFRDCs, FFRDCs were asked to provide only item 1 data, or their R&D expenditures by source of funding. The FFRDC R&D data are included in tables B70-72.

The survey population was reviewed prior to mailing the questionnaires to ensure that each institutional classification was accurate. Characteristics of the schools were reviewed before and during the course of the survey to determine if changes had occurred (i.e., in highest degree granted or in terms of school openings, closings, or mergers).

FY 2002 SURVEY FRAME DESIGN

The NSF Survey of Research and Development Expenditures at Universities and Colleges (academic R&D expenditures survey) is a census of the full population of eligible academic institutions. Prior to FY 1998, a census of eligible institutions was conducted about every five years; during intervening years eligible institutions were sampled. Since then, a census is conducted annually. NSF has also conducted a population review each year to ensure that all institutions that meet the inclusion criteria are surveyed. This review is based on the survey frame design developed in FY 1998:

- All S&E doctorate-granting institutions and all HBCUs are surveyed.
- All S&E master's and bachelor's degree-granting institutions that reported at least $150,000 in separately budgeted R&D expenditures in S&E in the previous fiscal year are surveyed. NSF contacted the master's and bachelor's degree-granting institutions that were not in the population prior to the census coverage to determine whether they met the $150,000 expenditure criterion. Institutions with a minimum of $150,000 were added or retained in the survey population.

In FY 2002 NSF conducted a population review using the above criteria. As a result of adding and deleting institutions from the survey population to comply with the inclusion criteria, the overall number of institutions surveyed increased from 646 in FY 2001 to 661 in FY 2002.

SURVEY INSTRUMENT

Most major R&D performers have incorporated into their record-keeping systems the data that are essential to complete this survey, thereby ensuring a consistent format from one year to the next. Such consistency yields the most useful statistics for time series. As a rule, information to complete this questionnaire is found within the institutions' year-end accounting records.

The survey questionnaire consists of five main items:

Item 1 is a request that institutions report their total current expenditures for separately budgeted science and engineering R&D for all activities specifically organized to produce research outcomes and either commissioned by an agency external to the institution or separately budgeted by an organizational unit (i.e., research centers) within the institution, by source of funds. In addition, schools are asked to provide the percentage of the total and the percentage of the federally financed expenditures that

are considered basic research. Also included are research funds for which an outside organization, educational or other, is a subrecipient. Care should be observed when interpreting data on source of funds; for example, industry R&D support is limited to grants and contracts for R&D activities from profit-making organizations. Total industry funds excludes research funded through unrestricted accounts and from corporate foundations, endowments, and fellowships to students; those funds would be included in an institution's own funding totals. An increasing number of institutions have links with industry and foundations via subcontracts, thus complicating the identification of funding source. In addition, institutional policy may determine whether unrestricted State support is reported as State or institutional funding.

Item 1A is a request for total and federally financed current fund expenditures for separately budgeted science and engineering R&D passed through the institution to subrecipients.

Item 1B is a request for total and federally financed current fund expenditures for separately budgeted science and engineering R&D received by the institution as a subrecipient.

Item 2 is a request for total and federally financed current fund expenditures for separately budgeted R&D activities by detailed S&E fields. When interpreting these data at the detailed discipline level, users should keep in mind that there is considerable interdisciplinary and multidisciplinary activity.

Item 3 is a request for the portions of total and federally financed expenditures reported in items 1 and 2 that were used for the purchase of research equipment out of current funds. This portion includes all research equipment purchased under sponsored research project awards and disbursed in the same detailed disciplines as in item 2. These data are of special interest to Federal and institutional policymakers in determining current funding levels for scientific research instrumentation.

ITEM 1A ANALYSIS

Item 1A was completed by 91.7 percent of the respondents from academic institutions. The total R&D expenditures passed through to subrecipients, $2.1 billion, represents 6.7 percent of item 1A respondents' total R&D expenditures and 5.7 percent of all separately budgeted R&D in FY 2002 (table 1). The doctorate-granting institutions reported a higher percentage of pass-through funds than the non-doctorate-granting institutions. Item 1A respondents from doctorate-granting institutions reported that $2.0 billion (6.7 percent) of their total R&D expenditures were passed through to subrecipients, versus $20 million (3.9 percent) of item 1A non-doctorate-granting respondents. Item 1A respondents from private institutions reported a higher percentage (8.1 percent) of pass-through funds than those from public institutions (5.9 percent).

Academic respondents to this question reported $1.8 billion in Federal R&D funds passed through to subrecipients. This amount represents 9.4 percent of the Federal support reported by item 1A respondents and 8.1 percent of the $22 billion in total Federal support (table 2).

Table A-6 shows the total amount of R&D expenditures passed through to subrecipients for the 100

TABLE 1. Item 1A summary of total academic R&D expenditures: FY 2002
(Dollars in thousands)

			R&D expenditures passed through to subrecipients		
Highest degree and control	All respondents' total R&D [1]	Item 1A respondents' total R&D [2]	Total [3]	Educational subrecipients	Other subrecipients
All academic institutions	36,127,882	30,689,763	2,056,336	938,563	656,429
Doctorate	35,541,373	30,170,188	2,036,264	927,011	649,377
Nondoctorate	586,509	519,575	20,072	11,552	7,052
Public	24,644,806	19,398,227	1,144,674	519,487	424,293
Private	11,483,076	11,291,536	911,662	419,076	232,136

[1] This total is the amount prior to imputation for nonrespondents.

[2] Item 1A measures the amount of R&D expenditures passed through the institution to subrecipients.

[3] Detail may not sum to totals due to rounding and because some institutions provided only total and Federal R&D expenditure data passed through to subrecipients.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2002.

TABLE 2. Item 1A summary of Federal academic R&D expenditures: FY 2002
(Dollars in thousands)

Highest degree and control	All respondents' Federal R&D [1]	Item 1A respondents' Federal R&D [2]	Federal R&D expenditures passed through to subrecipients			
			Total [3]	Educational subrecipients	Other subrecipients	
All academic institutions	21,688,213	18,688,548	1,750,415	830,456	521,936	
Doctorate	21,329,175	18,373,032	1,737,555	821,755	517,777	
Nondoctorate	359,038	315,516	12,860	8,701	4,159	
Public	13,228,939	10,382,195	970,027	459,249	352,371	
Private	8,459,274	8,306,353	780,388	371,207	169,565	

[1] This total is the amount prior to imputation for nonrespondents.

[2] Item 1A measures the amount of R&D expenditures passed through the institution to subrecipients.

[3] Detail may not sum to totals due to rounding and because some institutions provided only total and Federal R&D expenditure data passed through to subrecipients.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2002.

institutions reporting the highest amounts. Table A-7 shows the total amount of Federal R&D expenditures passed through to subrecipients for the 100 institutions reporting the highest amounts.

ITEM 1B ANALYSIS

This item was completed by 89.8 percent of the respondents from academic institutions. The total R&D expenditures received as subrecipients, $2.2 billion, represents 7.3 percent of the item 1B respondents' total R&D expenditures and 6.1 percent of all separately budgeted R&D in FY 2002 (table 3). The doctorate-granting institutions reported a lower percentage of funds received as subrecipients than the non-doctorate-granting institutions. Item 1B respondents from doctorate-granting institutions reported that $2.2 billion (7.3 percent) of their total R&D expenditures were received as subrecipients, versus $40 million (8.2 percent) of item 1B non-doctorate-granting respondents. Item 1B respondents from private institutions reported a slightly higher percentage (7.4 percent) of funds received as subrecipients than those from public institutions (7.2 percent).

Academic respondents to this question reported $1.9 billion in Federal R&D funds received as subrecipients. This amount represents 10.5 percent of the Federal support reported by item 1B respondents and 8.9 percent of the $22 billion in total Federal support (table 4).

Table A-8 shows the total amount of R&D expenditures received as subrecipients for the 100 institutions reporting the highest amounts. Table A-9 shows the total amount of Federal R&D expenditures received as subrecipients for the 100 institutions reporting the highest amounts.

TABLE 3. Item 1B summary of total academic R&D expenditures: FY 2002
(Dollars in thousands)

Highest degree and control	All respondents' total R&D [1]	Item 1B respondents' total R&D [2]	R&D expenditures received as a subrecipient		
			Total [3]	Higher education pass-through entities	Other passthrough entities
All academic institutions	36,127,882	29,973,497	2,190,853	897,447	927,285
Doctorate	35,541,373	29,484,300	2,150,888	878,562	906,205
Nondoctorate	586,509	489,197	39,965	18,885	21,080
Public	24,644,806	19,270,630	1,395,225	575,073	635,668
Private	11,483,076	10,702,867	795,628	322,374	291,617

[1] This total is the amount prior to imputation for nonrespondents.

[2] Item 1B measures the amount of R&D expenditures received as a subrecipient.

[3] Detail may not sum to totals due to rounding and because some institutions provided only total and Federal R&D expenditure data received as a

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2002.

TABLE 4. Item 1B summary of Federal academic R&D expenditures: FY 2002
(Dollars in thousands)

Highest degree and control	All respondents' Federal R&D [1]	Item 1B respondents' Federal R&D [2]	Federal R&D expenditures received as a subrecipient		
			Total [3]	Higher education pass-through entities	Other passthrough entities
All academic institutions	21,688,213	18,267,477	1,919,855	804,772	815,537
Doctorate	21,329,175	17,961,864	1,885,799	788,175	798,078
Nondoctorate	359,038	305,613	34,056	16,597	17,459
Public	13,228,939	10,393,544	1,189,843	509,021	552,114
Private	8,459,274	7,873,933	730,012	295,751	263,423

[1] This total is the amount prior to imputation for nonrespondents.

[2] Item 1B measures the amount of R&D expenditures received as a subrecipient.

[3] Detail may not sum to totals due to rounding and because some institutions provided only total and Federal R&D expenditure data received as a subrecipient.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2002.

Response Rate

The FY 2002 survey questionnaires were e-mailed in February 2003. Respondents could choose to submit an Adobe Portable Document Format questionnaire from the Web or use a Web-based data collection system to respond to the survey. Every effort was made to maintain close contact with respondents in order to preserve both consistency and continuity in the resultant data. Questionnaires were carefully examined for completeness upon receipt. Computerized facsimiles of the survey data were then prepared for each institution, comparing the current and 2 prior years of data and noting any substantive disparities. A personalized e-mail message was sent to the respondents so they could provide revisions before final processing and tabulation of the data. The e-mail message included a Web link to the academic R&D expenditures Web-based data collection system, allowing respondents to view and correct their data via the Web.

Respondents were asked to explain significant discrepancies between current and prior years' reporting patterns previously verified as correct. They were encouraged to correct prior years' data if anomalies were identified. When updated or amended figures covering past years were submitted, NSF changed trend data in this report and the underlying microdata database correspondingly. Similarly, if a respondent institution underwent an organizational change, such as a merger, NSF incorporated the effects of such changes into prior years' data.

By the survey closing date at the beginning of September 2003, forms had been received from 600 universities and colleges out of the academic population of 625, resulting in a 96.0 percent response rate. Responses were received from 97.8 percent of all doctorate-granting institutions, where 98.3 percent of the estimated national R&D expenditures in S&E fields was disbursed. Also, forms were received from all of the 36 FFRDCs. Table A-1 displays a detailed breakdown of the response rates by highest degree granted.

National Total and Imputation

To provide a national estimate for all universities and colleges performing R&D in FY 2002, it was necessary to implement two statistical procedures. First, data were estimated by "imputation" for the 25 institutions that had not responded by the closing date of the survey, using imputation techniques that have been used consistently since FY 1976. Second, data were also imputed for universities and colleges that submitted only partial responses. The imputed total was $205 million, or 0.6 percent of the $36 billion total R&D expenditures, as shown in table A-2.

Tables A-3a and A-3b present breakdowns of the total and Federal imputed amounts by S&E fields. The dollar amount imputed is displayed along with the percentage it represents of the national estimate for universities and colleges in a particular field. The amount imputed is similarly broken down by source of funds in table A-4.

A number of surveyed institutions have responded only intermittently in past years, providing data one year, not responding for one or more subsequent years, and then providing data again. For the years in which no response was received, data have been imputed as previously described. Although the imputation algorithm accurately reflects national trends, it cannot account for

specific trends at individual institutions. For this reason, a separate backcasting of prior years' data was performed, following current-year imputation.

For each institution, formerly imputed key variables for items 1 through 3 were recomputed to ensure that the imputed data accurately represent the growth patterns shown by reported data. If data were reported for fiscal years 1996 and 2002 but not for the intervening years, for example, the difference between the reported figures for each item total was calculated and evenly distributed across the intervening years (1997–2001). The new figures were spread across disciplines (items 2 and 3) or sources of support (item 1) on the basis of the most recent reporting pattern. A clean facsimile was generated for each of the institutions undergoing these procedures and returned to the school for comment. These procedures result in much more consistent reporting trends for individual institutions but have little effect upon aggregate figures reflecting national totals.

Changes in Basic Research Totals

The Division of Science Resources Statistics regularly reviews the methodologies used in its Survey of Research and Development Expenditures at Universities and Colleges with the goal of producing the most accurate statistics possible for researchers and policy makers. In FYs 2001 and 2002 a review of responses of total and Federal research funds that were basic research determined that the aggregate statistics could be improved by refining the imputation methodology for the item. For a number of reasons some universities and colleges are either unable or unwilling to respond to this item. Values must be imputed for them in order to present aggregate statistics.

In the past, if a respondent did not reply to the basic research items, the prior year's basic research share (whether reported by or imputed for the respondent) was carried forward. After interviews with respondents revealing that in some cases abnormal or erroneous values (such as zero percent basic research) were imputed forward for several years, a revised imputation methodology was introduced. The revised imputation methodology carries forward the prior year's basic research share only if that year's data were reported or estimated by the respondent. In all other cases an econometric model is used to impute the amount of total and Federal basic research for the respondent. The model employed takes into account differences between public and private institutions and non-Federal sources of R&D funding.

Data Anomalies

Aggregate academic expenditure data are generally consistent from year to year, although data for individual institutions may vary considerably. Data anomalies may reflect true increases or decreases in expenditures or may be the result of changes in reporting methodology. None were reported in FY 2002.

State Tables

The detailed statistical tables showing R&D expenditures at individual institutions by State provide detailed campus lists by control and source of funds in table B-29 and by control and science and engineering field in table B-31.

Highest Degree-Granted Tables

Several longitudinal tables display data for institutions whose highest S&E degree granted is at the doctoral level. In tables produced prior to FY 1992, it would have been difficult to identify whether changes in yearly R&D expenditures were caused by changes in expenditure levels or in the number of doctorate-granting institutions. In order to maintain a consistent group of institutions across all years in this report, the highest degree-granted status for each institution is based on the highest degree granted in the most recent year, FY 2002.

Data Availability

Data from this survey and previous reports are available on the Web at http://www.nsf.gov/sbe/srs/rdexp/.

Selected data items for institutions are available on the Web at http://www.nsf.gov/sbe/srs/profiles/start.htm. The institutional profiles cover data from this survey and data collected in NSF's other academic S&E surveys: the Survey of Graduate Students and Postdoctorates in Science and Engineering (graduate student survey) and the Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions (Federal S&E support survey). The profiles are also linked to the corresponding ranking table for each survey.

Data for these and other surveys are available through the Web-Based Computer-Aided Science Policy Analysis and Research (WebCASPAR) database system, which provides an extensive and growing data library with multiyear statistics on the state of higher education in general and on academic S&E resources specifically. This data library is based on a set of standard institutional

and field-of-science definitions across the multiple sources used to develop the database. The WebCASPAR program includes built-in help capabilities to facilitate the use and interpretation of the data. The latest version of WebCASPAR can be accessed via the Web at http://caspar.nsf.gov/webcaspar.

WebCASPAR data are drawn from a number of sources. All data are available for individual institutions, by State, and at the national level. Longitudinal data from surveys of universities and colleges conducted by the NSF Division of Science Resources Statistics include the academic R&D expenditures survey, the graduate student survey, and the Federal S&E support survey. Data included in WebCASPAR from the surveys of universities and colleges conducted by the National Center for Education Statistics include earned degrees, opening fall enrollment, tuition, faculty salaries, tenure and fringe benefits, and financial statistics.

SECTION A. TABLES

TABLE A-1. Response rates for the academic research and development expenditures survey, by respondent type and highest degree granted: fiscal year 2002

Respondent type and highest degree granted	Number in survey universe	Number of complete responses	Number of partial responses	Total number of responses	Response rate
Total	661	535	101	636	96.2
Universities and colleges	625	499	101	600	96.0
Doctorate	361	300	53	353	97.8
Master's	161	121	32	153	95.0
Bachelor's and below	103	78	16	94	91.3
All FFRDCs	36	36	0	36	100.0
University-administered FFRDCs	16	16	0	16	100.0
Industry-administered FFRDCs	4	4	0	4	100.0
Nonprofit-administered FFRDCs	16	16	0	16	100.0

FFRDC = federally funded research and development center.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-2. Imputed amounts for total research and development expenditures at universities and colleges, by highest degree granted: fiscal year 2002

(Dollars in millions)

Highest degree granted	Total separately budgeted R&D expenditures	Imputed amount	Imputed amount as percent of total
Total	36,333	205	0.6
Doctorate-granting institutions	35,714	173	0.5
Non-doctorate-granting institutions	619	32	5.2

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-3a. Imputed amounts for total research and development expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in millions)

Science and engineering field	Total separately budgeted R&D expenditures	Imputed amount	Imputed amount as percent of total
Total	36,333	205	0.6
Engineering	5,504	47	0.8
Aeronautical and astronautical	342	42	12.3
Bioengineering/biomedical	285	12	4.2
Chemical	430	15	3.4
Civil	721	14	1.9
Electrical	1,303	122	9.4
Mechanical	779	88	11.3
Metallurgical and materials	467	4	0.9
Other, nec	1,177	137	11.6
Physical sciences	3,008	29	1.0
Astronomy	402	0	0.1
Chemistry	1,129	21	1.9
Physics	1,282	18	1.4
Other, nec	196	2	0.9
Environmental sciences	2,022	39	1.9
Atmospheric	341	21	6.1
Earth sciences	645	39	6.0
Oceanography	719	37	5.2
Other, nec	317	61	19.3
Mathematical sciences	387	8	2.1
Computer sciences	1,126	10	0.9
Life sciences	21,404	138	0.6
Agricultural sciences	2,434	26	1.1
Biological sciences	6,578	69	1.0
Medical sciences	11,505	87	0.8
Other, nec	888	14	1.6
Psychology	671	3	0.4
Social sciences	1,583	23	1.4
Economics	284	9	3.0
Political science	271	3	1.0
Sociology	379	9	2.3
Other, nec	649	10	1.6
Other sciences, nec	627	30	4.7

nec = not elsewhere classified.

NOTES: The imputation rate at the total level is lower than the imputation rates at the S&E field levels because many institutions could provide totals but not the S&E field details. Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-3b. Imputed amounts for federally financed research and development expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in millions)

Science and engineering field	Total separately budgeted Federal R&D expenditures	Imputed amount	Imputed amount as percent of total
Total	21,834	146	0.7
Engineering	3,217	26	0.8
Aeronautical and astronautical	246	39	16.0
Bioengineering/biomedical	169	10	6.0
Chemical	229	11	4.7
Civil	308	9	3.0
Electrical	817	116	14.2
Mechanical	507	81	15.9
Metallurgical and materials	262	4	1.3
Other, nec	679	122	18.0
Physical sciences	2,124	17	0.8
Astronomy	277	0	0.1
Chemistry	737	12	1.6
Physics	971	12	1.2
Other, nec	139	1	0.7
Environmental sciences	1,294	28	2.2
Atmospheric	250	18	7.2
Earth sciences	374	30	8.1
Oceanography	486	32	6.6
Other, nec	184	50	26.9
Mathematical sciences	267	5	1.9
Computer sciences	770	8	1.0
Life sciences	12,852	92	0.7
Agricultural sciences	686	17	2.5
Biological sciences	4,406	46	1.1
Medical sciences	7,231	56	0.8
Other, nec	530	10	1.9
Psychology	474	2	0.4
Social sciences	616	14	2.2
Economics	101	5	5.2
Political science	76	1	1.6
Sociology	181	5	2.5
Other, nec	258	5	1.7
Other sciences, nec	220	11	5.1

nec = not elsewhere classified.

NOTES: The imputation rate at the total level is lower than the imputation rates at the S&E field levels because many institutions could provide totals but not the S&E field details. Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-4. Imputed amounts for research and development expenditures at universities and colleges, by source of funds: fiscal year 2002

(Dollars in millions)

Source of funds	Total separately budgeted R&D expenditures	Imputed amount	Imputed amount as percent of total
Total	36,333	205	0.6
Federal Government	21,834	146	0.7
State and local government	2,501	13	0.5
Industry	2,188	11	0.5
Institutional funds	7,109	28	0.4
All other sources	2,701	21	0.8

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-5. Number of surveyed institutions for the academic research and development expenditures survey, by respondent type and highest degree granted: fiscal years 1997--2002

Respondent type and highest degree granted	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Total	511	572	614	639	644	661
Universities and colleges	493	555	597	623	608	625
Doctorate	343	357	359	362	358	361
Master's	84	118	148	162	158	161
Bachelor's and below	66	80	90	99	92	103
All FFRDCs	18	17	17	16	36	36
University-administered FFRDCs	18	17	17	16	16	16
Industry-administered FFRDCs	0	0	0	0	4	4
Nonprofit-administered FFRDCs	0	0	0	0	16	16

FFRDC = federally funded research and development center.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-6. Total amount of R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures passed through [1]	Total R&D expenditures	R&D expenditures passed through to subrecipients		
		Total	Educational subrecipients	Other subrecipients
Total, all institutions	36,332,641	2,069,979	950,136	658,499
1 Johns Hopkins U., The	1,140,235	98,054	--	--
2 Stanford U.	538,474	61,876	--	--
3 U. MD College Park	324,980	57,380	0	57,380
4 Harvard U.	401,367	55,755	20,713	35,042
5 Duke U.	441,533	50,939	35,358	15,581
6 U. MI all campuses	673,724	49,101	32,170	16,931
7 U. PA	522,269	48,435	31,777	16,658
8 Columbia U. in the City of New York	405,403	43,471	24,344	19,127
9 U. NC Chapel Hill	370,806	42,940	17,131	25,809
10 U. Southern CA	372,397	40,274	15,318	24,956
Total, 1st 10 institutions	5,191,188	548,225	176,811	211,484
11 U. MN all campuses	494,265	39,463	--	--
12 U. CO all campuses	399,818	38,627	17,293	21,334
13 U. WI Madison	662,101	32,267	21,874	10,393
14 Baylor C. of Medicine	411,924	30,726	27,381	3,345
15 MA Institute of Technology	455,491	27,234	16,030	11,204
16 CA Institute of Technology	220,004	27,077	27,077	0
17 U. IL Urbana-Champaign	427,174	27,063	20,295	6,768
18 U. Pittsburgh all campuses	400,200	26,338	14,223	12,115
19 U. Chicago	225,264	23,768	18,426	5,342
20 GA Institute of Technology all campuses	340,347	23,054	--	--
Total, 1st 20 institutions	9,227,776	843,842	339,410	281,985
21 U. HI Manoa	161,823	22,458	5,508	16,950
22 Yale U.	354,243	22,295	--	--
23 OH State U. all campuses	432,387	22,217	11,048	11,169
24 Northwestern U.	282,154	21,305	--	--
25 Cornell U. all campuses	496,123	21,011	--	--
26 U. AL Birmingham, The	255,053	19,530	--	--
27 U. South FL	197,894	19,325	--	--
28 Carnegie-Mellon U.	188,191	17,685	11,096	6,589
29 Rutgers The State U. NJ, all campuses	258,829	17,172	13,333	3,839
30 U. AZ	390,827	17,169	--	--
Total, 1st 30 institutions	12,245,300	1,044,009	380,395	320,532
31 U. TX Southwestern Medical Ctr. Dallas	263,958	17,156	1,473	15,683
32 Boston U.	192,612	17,085	8,937	8,148
33 Washington U. St. Louis	416,960	17,020	11,975	5,045
34 U. FL	386,316	16,811	15,130	1,681
35 MS State U.	158,652	16,674	13,555	3,119

See explanatory information and SOURCE at end of table.

TABLE A-6. Total amount of R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures passed through [1]	Total R&D expenditures	R&D expenditures passed through to subrecipients		
		Total	Educational subrecipients	Other subrecipients
36 U. TX Houston Health Science Ctr.	138,380	16,175	10,623	5,552
37 Case Western Reserve U.	219,042	15,539	15,539	0
38 NC State U.	290,018	15,294	10,016	5,278
39 Purdue U. all campuses	285,778	15,236	9,520	5,716
40 Vanderbilt U.	208,305	14,857	9,066	5,791
Total, 1st 40 institutions	14,805,321	1,205,856	486,229	376,545
41 IN U. all campuses	299,080	14,263	11,239	3,024
42 U. UT	216,707	14,103	7,757	6,346
43 U. AK Fairbanks all campuses	116,279	14,020	--	--
44 NM State U. all campuses	103,078	13,881	4,085	9,796
45 U. IA	288,808	13,734	--	--
46 U. MS all campuses	67,838 i	13,643e	11,573e	2,070e
47 MI State U.	289,787	13,371	9,419	3,952
48 Emory U.	271,238	13,275	8,657	4,618
49 Princeton U.	164,408	13,227	8,572	4,655
50 Dartmouth C.	126,839	13,188	6,557	6,631
Total, 1st 50 institutions	16,749,383	1,342,561	554,088	417,637
51 U. Rochester	261,601	13,151	7,879	5,272
52 Mt. Sinai School of Medicine	185,335	13,068	13,068	0
53 U. NH	93,222	12,879	--	--
54 U. IL Chicago	259,852	12,631	6,174	6,457
55 U. GA	284,660	12,191	--	--
56 NY U.	222,978	11,864	9,961	1,903
57 FL State U.	134,351	11,810	2,481	9,329
58 Wake Forest U.	111,634	11,645	--	--
59 VA Polytechnic Institute & State U.	232,560	11,635	6,080	5,555
60 U. VA all campuses	182,340	11,526	7,631	3,895
Total, 1st 60 institutions	18,717,916	1,464,961	607,362	450,048
61 U. KY all campuses	236,275	11,389	11,389	0
62 Eastern VA Medical School	28,572	11,281	3,472	7,809
63 Drexel U.	44,465	11,066	--	--
64 U. Miami	171,319	11,050	4,705	6,345
65 U. TX M. D. Anderson Cancer Ctr.	262,145	10,821	7,744	3,077
66 U. TX Austin	320,966	10,586	5,010	5,576
67 U. NE Lincoln	171,431	10,079	4,876	5,203
68 U. TX Health Science Ctr. San Antonio	129,616	9,585	3,798	5,787
69 U. Cincinnati all campuses	217,739	9,296	3,815	5,481
70 George Washington U.	86,288	9,201	2,929	6,272
Total, 1st 70 institutions	20,386,732	1,569,315	655,100	495,598
71 OR State U.	161,735	8,910	6,371	2,539
72 U. of Medicine and Dentistry NJ	178,156	8,888	8,888	0
73 SUNY Stony Brook all campuses	184,045	8,841	--	--
74 Wayne State U.	199,007	8,812	5,689	3,123
75 U. MO-Columbia	177,011	8,521	4,431	4,090

See explanatory information and SOURCE at end of table.

TABLE A-6. Total amount of R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures passed through [1]	Total R&D expenditures	R&D expenditures passed through to subrecipients		
		Total	Educational subrecipients	Other subrecipients
76 U. CT all campuses	172,003	8,461	4,967	3,494
77 U. NM all campuses	150,598	8,460	6,853	1,607
78 OR Health Sciences U.	158,729	8,431	2,783	5,648
79 Rockefeller U.	166,603	8,251	8,251	0
80 Auburn U. all campuses	108,775	8,221	5,641	2,580
Total, 1st 80 institutions	22,043,394	1,655,111	708,974	518,679
81 U. TN System	188,261	8,130	4,083	4,047
82 U. TX Medical Branch Galveston	129,534	7,851	2,173	5,678
83 U. KS all campuses	172,131	7,768	5,641	2,127
84 U. AL, The	37,130	7,738	6,978	760
85 Yeshiva U.	157,124	7,666	7,666	0
86 Brown U.	109,482	7,608	--	--
87 SUNY Buffalo all campuses	239,735	7,415	5,130	2,285
88 AZ State U. main campus	123,016	7,327	3,714	3,613
89 U. Dayton	46,554	7,320	732	6,588
90 NM Institute of Mining and Technology	36,309	7,064	912	6,152
Total, 1st 90 institutions	23,282,670	1,730,998	746,003	549,929
91 U. TX El Paso	23,684	6,861	3,615	3,246
92 LA State U. all campuses	287,363	6,624	5,312	1,312
93 U. MA Worcester	132,729	6,606	6,606	0
94 MT State U.-Bozeman	78,211	6,605	--	--
95 U. Louisville	80,974	6,578	3,947	2,631
96 Tulane U.	102,998	6,554	4,953	1,601
97 San Diego State U.	64,302	6,317	4,062	2,255
98 U. OK all campuses	169,373	6,262	3,740	2,522
99 TX A&M U. all campuses	436,681	6,207	5,042	1,165
100 Rice U.	48,169	6,198	5,727	471
Total, 1st 100 institutions	24,707,154	1,795,810	789,007	565,132
Total, all other sampled institutions	11,625,487	274,169	161,129	93,367

-- = not available.
e = estimated.
i = imputed.

[1] Only the top 100 institutions that reported the largest amount of passed through funds are shown in this table.

NOTE: Because of rounding, detail may not add to totals. Also, detail may not add to totals because some respondents reporting total R&D funds passed through did not break out these funds by type of subrecipient (educational or other).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-7. Total amount of Federal R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures passed through [1]	Federal R&D expenditures	Federal R&D expenditures passed through		
		Total	Educational subrecipients	Other subrecipients
Total, all institutions	21,833,953	1,763,402	841,373	524,006
1 Johns Hopkins U., The	1,022,510	92,027	--	--
2 Stanford U.	426,620	58,660	--	--
3 U. MD College Park	194,095	47,271	0	47,271
4 Harvard U.	336,607	45,083	20,382	24,701
5 U. NC Chapel Hill	254,571	42,531	16,834	25,697
6 Columbia U. in the City of New York	356,749	42,024	23,533	18,491
7 U. MI all campuses	444,255	39,287	26,206	13,081
8 U. MN all campuses	295,301	37,086	--	--
9 U. CO all campuses	340,466	36,580	17,018	19,562
10 U. Southern CA	266,645	36,416	14,201	22,215
Total, 1st 10 institutions	3,937,819	476,965	118,174	171,018
11 Duke U.	261,356	33,512	33,512	0
12 U. PA	397,587	32,787	18,839	13,948
13 U. WI Madison	345,003	30,655	20,867	9,788
14 Baylor C. of Medicine	259,475	29,555	26,755	2,800
15 CA Institute of Technology	199,944	27,077	27,077	0
16 U. IL Urbana-Champaign	214,323	23,513	17,120	6,393
17 U. Chicago	183,830	22,770	17,602	5,168
18 U. HI Manoa	110,882	22,458	5,508	16,950
19 U. Pittsburgh all campuses	306,913	21,885	11,162	10,723
20 Cornell U. all campuses	270,578	20,353	--	--
Total, 1st 20 institutions	6,487,710	741,530	296,616	236,788
21 Yale U.	274,304	19,480	--	--
22 MA Institute of Technology	330,409	19,478	10,453	9,025
23 U. AL Birmingham, The	216,221	18,563	--	--
24 Northwestern U.	178,607	18,476	--	--
25 U. TX Southwestern Medical Ctr. Dallas	155,258	17,156	1,473	15,683
26 Boston U.	171,438	17,085	8,937	8,148
27 OH State U. all campuses	177,883	16,934	10,186	6,748
28 MS State U.	77,521	16,327	13,242	3,085
29 U. South FL	84,108	16,067	--	--
30 U. AZ	211,772	15,584	--	--
Total, 1st 30 institutions	8,365,231	916,680	340,907	279,477
31 Washington U. St. Louis	303,441	15,574	11,437	4,137
32 U. TX Houston Health Science Ctr	98,676	15,393	9,900	5,493
33 U. FL	167,108	14,671	13,204	1,467
34 U. UT	142,625	14,015	7,708	6,307
35 Carnegie-Mellon U.	137,967	13,998	8,021	5,977

See explanatory information and SOURCE at end of table.

TABLE A-7. Total amount of Federal R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures passed through [1]	Federal R&D expenditures	Federal R&D expenditures passed through		
		Total	Educational subrecipients	Other subrecipients
36 Case Western Reserve U.	181,888	13,501	13,501	0
37 Rutgers The State U. NJ, all campuses	91,205	13,323	11,370	1,953
38 NM State U. all campuses	70,314	13,308	4,085	9,223
39 Mt. Sinai School of Medicine	125,979	13,068	13,068	0
40 U. MS all campuses	50,092 i	12,987e	10,917e	2,070e
Total, 1st 40 institutions	9,734,526	1,056,518	444,118	316,104
41 U. AK Fairbanks all campuses	66,169	12,790	--	--
42 U. IA	180,743	12,538	--	--
43 Vanderbilt U.	172,858	12,071	8,399	3,672
44 Emory U.	186,083	11,940	8,404	3,536
45 U. NH	50,829	11,927	--	--
46 IN U. all campuses	132,759	11,805	8,856	2,949
47 NY U.	149,995	11,702	9,961	1,741
48 MI State U.	122,595	11,323	8,382	2,941
49 FL State U.	70,456	11,311	2,221	9,090
50 U. VA all campuses	152,358	11,196	7,441	3,755
Total, 1st 50 institutions	11,019,371	1,175,121	497,782	343,788
51 Dartmouth C.	87,255	11,146	6,139	5,007
52 Purdue U. all campuses	107,477	11,107	8,225	2,882
53 U. TX M. D. Anderson Cancer Ctr.	117,633	10,821	7,744	3,077
54 Drexel U.	30,232	10,760	--	--
55 U. GA	78,086	10,569	--	--
56 U. Rochester	195,298	10,235	6,927	3,308
57 NC State U.	75,204	10,220	6,862	3,358
58 U. NE Lincoln	51,405	9,802	4,758	5,044
59 Wake Forest U.	91,738	9,647	--	--
60 U. TX Health Science Ctr. San Antonio	83,761	9,585	3,798	5,787
Total, 1st 60 institutions	11,937,460	1,279,013	542,235	372,251
61 Princeton U.	97,724	9,518	7,665	1,853
62 U. Cincinnati all campuses	150,166	9,293	3,815	5,478
63 VA Polytechnic Institute & State U.	82,976	9,256	5,513	3,743
64 U. IL Chicago	143,183	9,102	5,541	3,561
65 U. of Medicine and Dentistry NJ	90,235	8,888	8,888	0
66 U. TX Austin	219,158	8,707	4,464	4,243
67 U. KY all campuses	100,426	8,654	8,654	0
68 Auburn U. all campuses	42,432	8,221	5,641	2,580
69 Rockefeller U.	67,559	8,087	8,087	0
70 U. NM all campuses	104,252	8,014	6,714	1,300
Total, 1st 70 institutions	13,035,571	1,366,753	607,217	395,009
71 OR Health Sciences U.	130,231	7,840	2,747	5,093
72 Yeshiva U.	114,268	7,666	7,666	0
73 U. CT all campuses	93,326	7,439	4,460	2,979
74 SUNY Stony Brook all campuses	108,122	7,397	--	--
75 U. MO-Columbia	77,742	7,327	3,810	3,517

See explanatory information and SOURCE at end of table.

TABLE A-7. Total amount of Federal R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures passed through [1]	Federal R&D expenditures	Federal R&D expenditures passed through		
		Total	Educational subrecipients	Other subrecipients
76 U. KS all campuses	82,663	7,299	5,438	1,861
77 George Washington U.	58,729	7,291	2,291	5,000
78 U. Dayton	40,191	7,250	725	6,525
79 U. AL, The	26,900	6,989	6,653	336
80 Wayne State U.	95,910	6,949	5,103	1,846
Total, 1st 80 institutions	13,863,653	1,440,200	646,110	422,166
81 AZ State U. main campus	64,407	6,912	3,460	3,452
82 Brown U.	68,215	6,877	--	--
83 U. Miami	121,171	6,648	3,890	2,758
84 NM Institute of Mining and Technology	18,864	6,626	855	5,771
85 SUNY Buffalo all campuses	128,842	6,626	4,745	1,881
86 U. MA Worcester	93,992	6,341	6,341	0
87 Rice U.	39,739	6,108	5,637	471
88 U. TX El Paso	16,457	5,952	3,501	2,451
89 U. TN System	88,344	5,912	4,019	1,893
90 OR State U.	91,683	5,891	3,985	1,906
Total, 1st 90 institutions	14,595,367	1,504,093	682,543	442,749
91 Tulane U.	64,824	5,741	4,929	812
92 TX A&M U. all campuses	163,488	5,633	4,881	752
93 WV U.	49,394	5,475	2,965	2,510
94 Clemson U.	47,174	5,431	4,978	453
95 LA State U. all campuses	97,928	5,027	4,259	768
96 WA State U.	56,360	4,909	3,068	1,841
97 U. TX Medical Branch Galveston	78,100	4,851	2,173	2,678
98 MT State U.-Bozeman	39,986	4,624	--	--
99 Medical U. SC	75,803	4,609	1,252	3,357
100 U. AL Huntsville, The	35,660	4,584	2,222	2,362
Total, 1st 100 institutions	15,304,084	1,554,977	713,270	458,282
Total, all other sampled institutions	6,529,869	208,425	128,103	65,724

-- = not available.
e = estimated.
i = imputed.

[1] Only the top 100 institutions that reported the largest amount of passed through funds are shown in this table.

NOTE: Because of rounding, detail may not add to totals. Also, detail may not add to totals because some respondents reporting Federal R&D funds passed through did not break out these funds by type of subrecipient (educational or other).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-8. Total amount of R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures received as a subrecipient [1]	Total R&D expenditures	R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
Total, all institutions	36,332,641	2,194,923	900,970	927,832
1 U. MI all campuses	673,724	66,459	35,694	30,765
2 TX A&M U. all campuses	436,681	63,458	52,271	11,187
3 MA Institute of Technology	455,491	60,776	23,888	36,888
4 Stanford U.	538,474	59,062	--	--
5 OH State U. all campuses	432,387	45,140	18,871	26,269
6 Johns Hopkins U., The	1,140,235	42,015	--	--
7 U. CO all campuses	399,818	39,680	17,669	22,011
8 Harvard U.	401,367	37,723	14,232	23,491
9 Columbia U. in the City of New York	405,403	37,655	17,884	19,771
10 U. WI Madison	662,101	36,602	17,309	19,293
Total, 1st 10 institutions	5,545,681	488,570	197,818	189,675
11 U. TX Austin	320,966	36,479	14,903	21,576
12 U. AZ	390,827	34,718	--	--
13 U. Southern CA	372,397	31,728	16,624	15,104
14 U. IL Urbana-Champaign	427,174	31,074	12,122	18,952
15 CA Institute of Technology	220,004	29,811	29,811	0
16 Cornell U. all campuses	496,123	28,975	12,454	16,521
17 U. MN all campuses	494,265	28,879	--	--
18 GA Institute of Technology all campuses	340,347	28,718	--	--
19 U. Pittsburgh all campuses	400,200	25,988	--	--
20 Northwestern U.	282,154	25,891	--	--
Total, 1st 20 institutions	9,290,138	790,831	283,732	261,828
21 U. MD College Park	324,980	24,928	7,014	17,914
22 Rutgers The State U. NJ, all campuses	258,829	23,348	13,335	10,013
23 Washington U. St. Louis	416,960	22,780	9,679	13,101
24 Emory U.	271,238	22,704	8,747	13,957
25 U. Chicago	225,264	21,733	11,544	10,189
26 U. FL	386,316	21,600	7,126	14,474
27 U. AL Birmingham, The	255,053	21,054	14,467	6,587
28 Purdue U. all campuses	285,778	20,786	5,642	15,144
29 Yale U.	354,243	20,399	--	--
30 U. NC Chapel Hill	370,806	20,027	12,861	7,166
Total, 1st 30 institutions	12,439,605	1,010,190	374,147	370,373
31 FL State U.	134,351	19,971	3,528	16,443
32 U. Rochester	261,601	19,743	--	--
33 U. UT	216,707	18,824	7,992	10,832
34 Carnegie-Mellon U.	188,191	18,258	7,867	10,391
35 Boston U.	192,612	17,974	10,037	7,937

See explanatory information and SOURCE at end of table.

TABLE A-8. Total amount of R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures received as a subrecipient [1]	Total R&D expenditures	R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
36 LA State U. all campuses	287,363	17,065	9,837	7,228
37 U. NM all campuses	150,598	16,928	5,408	11,520
38 U. OK all campuses	169,373	16,709	3,977	12,732
39 U. KY all campuses	236,275	16,619	3,652	12,967
40 U. HI Manoa	161,823	16,460	3,510	12,950
Total, 1st 40 institutions	14,438,499	1,188,741	429,955	473,373
41 VA Polytechnic Institute & State U.	232,560	15,970	5,701	10,269
42 U. AK Fairbanks all campuses	116,279	15,830	--	--
43 AZ State U. main campus	123,016	15,753	5,253	10,500
44 PA State U. all campuses	492,739	15,310	15,310	0
45 IN U. all campuses	299,080	14,906	8,007	6,899
46 U. IL Chicago	259,852	14,137	6,959	7,178
47 Auburn U. all campuses	108,775	14,117	5,817	8,300
48 MI State U.	289,787	13,994	6,177	7,817
49 OR State U.	161,735	13,909	7,795	6,114
50 Tulane U.	102,998	13,520	3,858	9,662
Total, 1st 50 institutions	16,625,320	1,336,187	494,832	540,112
51 Case Western Reserve U.	219,042	13,200	13,200	0
52 Vanderbilt U.	208,305	12,977	8,081	4,896
53 George Washington U.	86,288	12,907	3,615	9,292
54 NC State U.	290,018	12,411	8,841	3,570
55 U. CT all campuses	172,003	11,996	4,947	7,049
56 U. KS all campuses	172,131	11,979	4,955	7,024
57 Princeton U.	164,408	11,969	10,165	1,804
58 Catholic U. America	22,883	11,734	356	11,378
59 MT State U.-Bozeman	78,211	11,731	--	--
60 U. IA	288,808	11,387	--	--
Total, 1st 60 institutions	18,327,417	1,458,478	548,992	585,125
61 U. NH	93,222	10,831	3,186	7,645
62 MS State U.	158,652	10,428	4,083	6,345
63 U. TX M. D. Anderson Cancer Ctr.	262,145	10,296	6,991	3,305
64 Baylor C. of Medicine	411,924	10,233	7,317	2,916
65 Duke U.	441,533	10,191	8,538	1,653
66 Mt. Sinai School of Medicine	185,335	10,160	143	10,017
67 U. TX Houston Health Science Ctr.	138,380	10,121	7,912	2,209
68 WV U.	84,985	10,068	2,553	7,515
69 U. NV, Reno	66,721	9,959	7,568	2,391
70 NY U.	222,978	9,888	5,147	4,741
Total, 1st 70 institutions	20,393,292	1,560,653	602,430	633,862
71 OK State U. all campuses	94,987	9,785	--	--
72 U. MO-Columbia	177,011	9,601	4,360	5,241
73 Clark Atlanta U.	17,194	9,585	1,092	8,493
74 Wayne State U.	199,007	9,348	4,648	4,700
75 OR Health Sciences U.	158,729	9,219	3,720	5,499

See explanatory information and SOURCE at end of table.

TABLE A-8. Total amount of R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures received as a subrecipient [1]	Total R&D expenditures	R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
76 U. SC all campuses	123,108	9,204	3,910	5,294
77 Rice U.	48,169	9,165	8,071	1,094
78 U. TX Southwestern Medical Ctr. Dallas	263,958	8,788	1,380	7,408
79 SUNY Albany	67,493	8,569	2,826	5,743
80 U. Cincinnati all campuses	217,739	8,311	2,253	6,058
Total, 1st 80 institutions	21,760,687	1,652,228	634,690	683,392
81 U. ME	62,149	8,232	1,850	6,382
82 WA State U.	112,469	8,212	3,785	4,427
83 SUNY Stony Brook all campuses	184,045	8,193	4,562	3,631
84 U. NE Lincoln	171,431	8,102	2,390	5,712
85 U. Southern MS	25,685	7,892	5,998	1,894
86 NM State U. all campuses	103,078	7,813	2,295	5,518
87 U. DE	85,157	7,756	2,884	4,872
88 Medical U. SC	132,030	7,685	1,905	5,780
89 U. TX Health Science Ctr. San Antonio	129,616	7,639	3,162	4,477
90 KS State U.	106,804	7,551	5,425	2,126
Total, 1st 90 institutions	22,873,151	1,731,303	668,946	728,211
91 Thomas Jefferson U.	102,974	7,524	4,625	2,899
92 Dartmouth C.	126,839	7,442	5,119	2,323
93 Brown U.	109,482	7,375	3,824	3,551
94 Tufts U.	109,291	6,936	3,335	3,601
95 Woods Hole Oceanographic Institution	99,964	6,925	6,925	0
96 U. AL Huntsville, The	48,353	6,771	4,106	2,665
97 U. AL, The	37,130	6,657	3,516	3,141
98 U. Miami	171,319	6,503	3,608	2,895
99 U. Memphis, The	33,625	6,499	1,929	4,570
100 U. GA	284,660	6,496	--	--
Total, 1st 100 institutions	23,996,788	1,800,431	705,933	753,856
Total, all other sampled institutions	12,335,853	394,492	195,037	173,976

-- = not available.

[1] Only the top 100 institutions that reported the largest amount of R&D expenditures received as a subrecipient are shown in this table.

NOTE: Because of rounding, detail may not add to totals. Also, detail may not add to totals because some respondents reporting total R&D funds received as a subrecipient did not break out these funds by type of pass-through entity (educational or other).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-9. Total amount of Federal R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures received as a subrecipient [1]	Federal R&D expenditures	Federal R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
Total, all institutions	21,833,953	1,923,732	808,114	816,072
1 TX A&M U. all campuses	163,488	62,749	51,864	10,885
2 U. MI all campuses	444,255	60,974	33,183	27,791
3 Stanford U.	426,620	58,214	--	--
4 MA Institute of Technology	330,409	55,330	22,117	33,213
5 Johns Hopkins U., The	1,022,510	42,015	--	--
6 U. CO all campuses	340,466	39,495	17,526	21,969
7 U. WI Madison	345,003	36,602	17,309	19,293
8 U. TX Austin	219,158	36,479	14,903	21,576
9 Columbia U. in the City of New York	356,749	36,370	16,999	19,371
10 Harvard U.	336,607	35,917	13,170	22,747
Total, 1st 10 institutions	3,985,265	464,145	187,071	176,845
11 U. AZ	211,772	34,717	--	--
12 CA Institute of Technology	199,944	29,811	29,811	0
13 U. IL Urbana-Champaign	214,323	28,311	10,984	17,327
14 Cornell U. all campuses	270,578	27,477	10,956	16,521
15 U. MN all campuses	295,301	26,459	--	--
16 U. Pittsburgh all campuses	306,913	24,685	--	--
17 U. Southern CA	266,645	24,097	14,277	9,820
18 Northwestern U.	178,607	22,310	--	--
19 Washington U. St. Louis	303,441	22,207	9,525	12,682
20 Rutgers The State U. NJ, all campuses	91,205	21,312	12,326	8,986
Total, 1st 20 institutions	6,323,994	725,531	274,950	242,181
21 U. AL Birmingham, The	216,221	21,054	14,467	6,587
22 U. Chicago	183,830	20,581	11,031	9,550
23 Yale U.	274,304	20,399	--	--
24 FL State U.	70,456	19,971	3,528	16,443
25 Emory U.	186,083	18,671	8,447	10,224
26 U. NC Chapel Hill	254,571	18,259	11,700	6,559
27 U. FL	167,108	18,234	6,905	11,329
28 U. UT	142,625	18,172	7,715	10,457
29 U. MD College Park	194,095	18,083	5,952	12,131
30 Boston U.	171,438	17,974	10,037	7,937
Total, 1st 30 institutions	8,184,725	916,929	354,732	333,398
31 Carnegie-Mellon U.	137,967	17,886	7,837	10,049
32 U. Rochester	195,298	17,168	--	--
33 U. NM all campuses	104,252	16,928	5,408	11,520
34 U. OK all campuses	69,388	16,709	3,977	12,732
35 U. KY all campuses	100,426	16,619	3,652	12,967

See explanatory information and SOURCE at end of table.

TABLE A-9. Total amount of Federal R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures received as a subrecipient [1]	Federal R&D expenditures	Federal R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
36 U. HI Manoa	110,882	16,460	3,510	12,950
37 VA Polytechnic Institute & State U.	82,976	15,970	5,701	10,269
38 AZ State U. main campus	64,407	14,983	4,879	10,104
39 U. IL Chicago	143,183	14,137	6,959	7,178
40 Auburn U. all campuses	42,432	14,117	5,817	8,300
Total, 1st 40 institutions	9,235,936	1,077,906	402,472	429,467
41 OR State U.	91,683	13,909	7,795	6,114
42 IN U. all campuses	132,759	13,786	6,887	6,899
43 Case Western Reserve U.	181,888	13,200	13,200	0
44 Vanderbilt U.	172,858	12,977	8,081	4,896
45 Tulane U.	64,824	12,705	3,258	9,447
46 MI State U.	122,595	12,479	6,137	6,342
47 NC State U.	75,204	12,411	8,841	3,570
48 Purdue U. all campuses	107,477	12,082	5,642	6,440
49 U. CT all campuses	93,326	11,996	4,947	7,049
50 U. KS all campuses	82,663	11,936	4,955	6,981
Total, 1st 50 institutions	10,361,213	1,205,387	472,215	487,205
51 Catholic U. America	17,925	11,734	356	11,378
52 U. IA	180,743	11,387	--	--
53 Princeton U.	97,724	11,270	9,466	1,804
54 U. NH	50,829	10,831	3,186	7,645
55 MS State U.	77,521	10,368	4,024	6,344
56 U. TX M. D. Anderson Cancer Ctr.	117,633	10,296	6,991	3,305
57 Baylor C. of Medicine	259,475	10,233	7,317	2,916
58 Mt. Sinai School of Medicine	125,979	10,160	143	10,017
59 U. TX Houston Health Science Ctr.	98,676	10,121	7,912	2,209
60 WV U.	49,394	10,068	2,553	7,515
Total, 1st 60 institutions	11,437,112	1,311,855	514,163	540,338
61 U. NV, Reno	39,958	9,959	7,568	2,391
62 OK State U. all campuses	31,100	9,650	--	--
63 U. MO-Columbia	77,742	9,601	4,360	5,241
64 Clark Atlanta U.	15,325	9,569	1,076	8,493
65 Wayne State U.	95,910	9,348	4,648	4,700
66 U. SC all campuses	53,403	9,204	3,910	5,294
67 Rice U.	39,739	9,165	8,071	1,094
68 NY U.	149,995	8,411	5,147	3,264
69 SUNY Stony Brook all campuses	108,122	8,193	4,562	3,631
70 WA State U.	56,360	8,048	3,785	4,263
Total, 1st 70 institutions	12,104,766	1,403,003	557,290	578,709
71 OR Health Sciences U.	130,231	8,045	3,479	4,566
72 U. Cincinnati all campuses	150,166	7,998	2,110	5,888
73 MT State U.-Bozeman	39,986	7,978	--	--
74 NM State U. all campuses	70,314	7,813	2,295	5,518
75 U. DE	48,183	7,756	2,884	4,872

See explanatory information and SOURCE at end of table.

TABLE A-9. Total amount of Federal R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures received as a subrecipient [1]	Federal R&D expenditures	Federal R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
76 U. NE Lincoln	51,405	7,728	2,227	5,501
77 Medical U. SC	75,803	7,641	1,905	5,736
78 U. TX Health Science Ctr. San Antonio	83,761	7,639	3,162	4,477
79 KS State U.	43,988	7,551	5,425	2,126
80 Thomas Jefferson U.	79,217	7,509	4,610	2,899
Total, 1st 80 institutions	12,877,820	1,480,661	585,387	620,292
81 U. Southern MS	22,398	7,455	5,561	1,894
82 Dartmouth C.	87,255	7,442	5,119	2,323
83 Brown U.	68,215	7,375	3,824	3,551
84 U. TX Southwestern Medical Ctr. Dallas	155,258	7,293	1,380	5,913
85 Woods Hole Oceanographic Institution	78,458	6,925	6,925	0
86 U. AL Huntsville, The	35,660	6,638	4,025	2,613
87 U. AL, The	26,900	6,638	3,497	3,141
88 SUNY Albany	40,497	6,563	2,360	4,203
89 U. Memphis, The	14,072	6,499	1,929	4,570
90 U. GA	78,086	6,496	--	--
Total, 1st 90 institutions	13,484,619	1,549,985	620,007	648,500
91 NM Institute of Mining and Technology	18,864	6,466	1,632	4,834
92 U. ID	33,465	6,290	1,830	4,460
93 MI Technological U.	17,973	6,095	--	--
94 Howard U.	33,949	6,040	--	--
95 Rensselaer Polytechnic Institute	26,490	6,039	3,633	2,406
96 U. Miami	121,171	5,956	3,087	2,869
97 Tufts U.	73,236	5,858	3,099	2,759
98 Old Dominion U.	17,170	5,827	2,512	3,315
99 George Washington U.	58,729	5,770	1,139	4,631
100 MCP Hahnemann U.	26,619	5,575	2,005	3,570
Total, 1st 100 institutions	13,912,285	1,609,901	638,944	677,344
Total, all other sampled institutions	7,921,668	313,831	169,170	138,728

-- = not available.

[1] Only the top 100 institutions that reported the largest amount of R&D expenditures received as a subrecipient are shown in this table.

NOTE: Because of rounding, detail may not add to totals. Also, detail may not add to totals because some respondents reporting Federal R&D funds received as a subrecipient did not break out these funds by type of pass-through entity (educational or other).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.